

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 06 JUN 2005

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Applicant's or agent's file reference ASI-PT067.1W	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/US04/04980	International filing date (day/month/year) 19 February 2004 (19.02.2004)	Priority date (day/month/year) 01 July 2003 (01.07.2003)	
International Patent Classification (IPC) or national classification and IPC IPC(7): G06K 7/10 and US Cl.: 235/472.01, 472.02, 472.03, 462.01-462.42			
Applicant ACCU-SORT SYSTEMS, INC.			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
- a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_ sheets, as follows:
- ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

## 4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 09 February 2005 (09.02.2005)	Date of completion of this report 21 March 2005 (21.03.2005)
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer D. I. Lee Jean Proctor Paralegal Specialist Telephone No. 703-308-0956

Form PCT/IPEA/409 (cover sheet)(January 2004)

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/04980

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☒ the description:

pages 1-10 as originally filed/furnished  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_

☒ the claims:

pages 11-13 as originally filed/furnished  
pages\* NONE as amended (together with any statement) under Article 19  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_

☒ the drawings:

pages 1/3-3/3 as originally filed/furnished  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages none  
☒ the claims, Nos. none  
☒ the drawings, sheets/figs none  
☒ the sequence listing (*specify*): none  
☒ any table(s) related to the sequence listing (*specify*): none

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (*specify*): \_\_\_\_\_  
☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.  
PCT/US04/04980

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>1-11</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>7-8, 1-11</u>	YES
	Claims <u>1-6, 9</u>	NO
Industrial Applicability (IA)	Claims <u>1-11</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and Explanations (Rule 70.7)**  
Please See Continuation Sheet

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

**V. 2. Citations and Explanations:**

Claims 1-6 and 9 lack an inventive step under PCT Article 33(3) as being obvious over Good et al. [US 6,382,515] in view of Aragon [US 5,477,044].

Re claims 1-3 and 9: Good teaches a system for correlating machine readable information with dimensioning data for conveyor borne packages (see the abstract and figure 1E for example), comprising:

a conveyor (a scanning tunnel) adapted to transport a plurality of packages thereon, at least some of the package bearing machine readable information (see figures 1 and 33 for example);

a stationary scanner located in an area proximate to the conveyor (a scanner positioned near the tunnel, see figures 1 and 31);

a position detector (a coordinate reference frame work embedded in the conveyor subsystem) that determines a three dimensional position and a pitch, a roll, and a yaw of the scanner including determining a specific time (a time stamping of each scan beam data) when the machine readable information is read (a see col. 40, lines 3+; col. 43, lines 24+; and figures 2A, 2B for example);

a controller that receives at least one signal from the position detector and is adapted to determine a beam vector between the movable handheld scanner and the machine readable information on one of the plurality of packages when the machine readable information is read by the handheld scanner, the controller being adapted to determine an associate portion of the conveyor that corresponds to the beam vector (see col. 50, lines 51 and figures 45+);

a dimensioning station for determining dimensioning data for the at least one package on the associated portion of the conveyor, the controller being adapted to correlate the dimensioning data with the beam vector to associate dimensioning data with the one of the plurality of packages bearing the corresponding machine readable information (see col. 40, lines 2+; col. 43, lines 31+).

Good does not teach the scanner of the system is a hand-held scanner that is not tethered.

Aragon teaches a movable scanner (i.e., a hand-held scanner that is not tethered to the system) with a position detector that determines a three dimensional position and a pitch, a roll, and a yaw of the movable handheld scanner (i.e., x, y, z position of the movable handheld scanner or the scanning mean is rotatable about three axes of rotation relative to the handle (see the abstract).

## Supplemental Box

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide a hand-held scanning in the system of Good in order to provide a portability of the scanning device in the system of Good and thus, provide a greater freedom of movement of the scanner within the system.

Re claims 4-6: Although Good teach the scanner having a wireless communication with the controller via an infrared signal, but silent with respect to other types of the wireless communication.

Claims 7-8 and 10-11 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the specific step of the system, such as reading the information prior to obtaining the dimensioning data and reading the information in response to the scanner trigger activation, and a plurality of receiver sensors disposed on the movable handheld scanner and a plurality of transmitting sensor, as set forth in the claims.

Applicant's requested for reconsideration of the Written Opinion of the International Search Authority with respect to Good reference that Good et al uses fixed position scanner and does not provide a hand held scanner, and further there is no suggestion or disclosure of orienting a handheld scanner toward a package since the scan tunnel uses a plurality of scanners to scan an entire area of the conveyor and determines the specific vector-based-ray for a fixed scanner at the time a bar code is read so that it can be associates with dimensioning data for a particular package. Although Good reference does not directly teach the scanner of the system orienting a handheld scanner toward a package, that specific teaching of scanner being a handheld and orienting the scanner toward the package upon determination of the specific vector-based-ray are taught by Aragon. Aragon teaches a movable scanner (i.e., a hand-held scanner that is not tethered to the system) with a position detector that determines a three dimensional position and a pitch, a roll, and a yaw of the movable handheld scanner (i.e., vector-based-ray having x, y, z position of the movable handheld scanner or the scanning mean is rotatable about three axes of rotation relative to the handle (see the abstract). Thus, applicant's argument on this point is not persuasive.